Hovsepian v. Apple, Inc.
Doc. 250 Att. 1

Exhibit A, Part 2

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> A transmission system for providing information to be transmitted to ***remote locations***;
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> * * *
>
> transmitter means, coupled to the compressed data storing means, for sending at least a portion of one of the files to one of the ***remote locations***.

In claim 41, the phrase "remote locations" is used in the phrases:

> A method of transmitting information to ***remote locations***; the transmission method comprising the steps, performed by a transmission system,
>
> * * *
>
> sending at least a portion of the file to one of the ***remote locations***.

The Court must begin with the ordinary and customary meaning of the words of the phrase "remote locations." Arlington Industries, 345 F.2d at 1326. The term "remote" has a relevant dictionary definition: "**1 :** separated by an interval or space greater than usual" (Webster's Ninth New Collegiate Dictionary, Merriam-Webster, Inc., at 996 (1983) (hereinafter "Webster's"); Exhibit ___). Another way of expressing this definition is "distant in space." The term "location" has a relevant dictionary definition: "**1 a :** a position or site occupied or available for occupancy or marked by some distinguishing feature." (Webster's, at 700; Exhibit 12). The ordinary and customary meaning of "remote locations" is therefore "positions or sites that are distant in space."

In the context of claims 1 and 41, the term "remote locations" is described in relation to the transmission system: "A transmission system for providing information to be transmitted to remote locations . . ." and "A method of transmitting information to remote locations; the transmission method comprising the steps, performed by a transmission system." Thus, in the context of the claims, the phrase "remote locations" must be relative to the location of the transmission system and therefore, consistent with its ordinary and customary meaning and in the context of claims 1 and 41 of the '992 patent, the phrase "remote locations" means "positions or sites distant in space from the position(s) or site(s) of the transmission system." CCS

Fitness, 288 F.3d at 1366.

To determine whether the ordinary and customary definition of "remote locations" is consistent with the use of these words by the inventors, the Court must also consult the intrinsic patent record. Texas Digital, 308 F.3d at 1204.

In the specification of the '992 patent, the inventors describe the fact that, at the time of the invention, video tapes must be obtained by rental or purchase and that "remote accessing has not yet been integrated into an efficient system." ('992 patent, 1:11-17). One of the objects of the invention is therefore to allow the user to "remotely select audio/video material from any location that has either telephone service or a computer." ('992 patent, 1:62-66; emphasis added). The specification further describes that the transmitter means sends at least a portion of a file to at least one remote location and that information is sent from the transmission system 100 to remote locations. ('992 patent, 15:61-65; 18:46-50).[16] Thus, the intrinsic patent documents wholly reinforce the ordinary and customary definition of "remote locations."

B. "Library Means For Storing Items Containing Information"

The phrase "library means for storing items containing information" is found in claim 1 of the '992 patent. (Exhibit 5 shows the use of this phrase throughout the '992 patent). Acacia contends this is not a means plus function limitation, because the sufficient structure is disclosed in the claim. The phrase is comprised of three separate terms/phrases: (1) library; (2) storing; and (3) items containing information. Each is discussed below.

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[16] There are embodiments described in the specification wherein a user "may remotely access the transmission system 100 from a location different than the location of the reception system 200 where the material will be sent and/or played back" and "[a]fter the desired item is found, the user selects the item for transmission at a specific time and location." ('992 patent, 5:14-17; 15:20-22). These are merely different embodiments of the invention described in the specification, and nothing in the specification limits the invention to these embodiments. Brookhill-Wilk, 334 F.3d at 1300 (construing the phrase "remote location" as having its ordinary and customary meaning and refusing to limit the construction to embodiments of the specification.) Further, other embodiments, set forth in the specification and described above, do not require that the user be able to select the location for receipt of the transmission. ('992 patent, 15:61-65; 18:46-50).

1. The Meaning Of The Term "Library"

The term "library" should be construed as "a place where materials are kept or a collection of such materials." The term "library" has a relevant dictionary definition: "**1 a:** a place in which literary, musical, artistic, or reference materials (as books, manuscripts, recordings, or films) are kept for use, but not for sale **b:** a collection of such materials." (Webster's, at 688; Exhibit 12).

In the specification of the '992 patent, the inventors used the term in its ordinary and customary way. They stated that items are stored in the source material library. ('992 patent, 6:52-54; 6:62-64; 18:1-3; 18:53-59; 19:51-54). The inventors further described the library as having a geographical location which can be remote from a database or remote from a receiving system. ('992 patent, 2:65-66; 6:23-30; 15:13-15). They also described libraries as being able to communicate via any available method with any other library in the transmission system. ('992 patent, 6:28-34).

2. The Meaning Of The Term "Storing"

The term "storing" should be construed as having its ordinary and customary meaning -- "providing storage room for." The term "store" has a relevant dictionary definition: "**4:** to provide storage room for: HOLD <elevators for *storing* surplus wheat>." (Webster's, at 1162; Exhibit 12). This particular definition of "store" applies, because the claim uses the term "library," which connotes storage, and because the specification states that the "invention preferably includes source material library means for temporary storage of items prior to conversion and subsequent storage in a compressed data library means." ('992 patent, 5:66-6:2; emphasis added; See, also, 6:52-54; 6:62-64; 18:1-3; 18:53-59; 19:51-54). Indeed, the example of the usage of this meaning of "store" in the dictionary ("elevators for *storing* surplus wheat") is in the same form as that in the claim.

3. The Meaning of the Phrase "Items Containing Information"

The phrase "items containing information" should be construed as follows: "units or members of a group or groups which contain information. Information is the meaning assigned to data by known conventions." The term "item" has a relevant dictionary definition: "**2** A separate particular in an enumeration, account, or series: ARTICLE" (Webster's at 643; Exhibit 12). Another way of expressing this definition is "one unit or a member of a group." The term "items" is the plural of "item" and therefore "items" are "units or members of a group or groups."

The term "information" has a relevant dictionary definition: "**(1)** the meaning assigned to data by known conventions." (IEEE Standard Dictionary of Electrical and Electronic Terms, Fourth Edition, at 473 (1988) (hereinafter "IEEE Dictionary"); Exhibit 13).

The specification uses this phrase consistent with its ordinary and customary meaning. It states that items of information are stored in the source material library means and may be in either analog or digital form. ('992 patent, 5:66 - 6:7; 6:62-64; 19:51-56; Fig. 8e). The items stored are materials, such as "television programs, movies, audio recordings, still pictures, files, books, computer tapes, computer disks, documents of various sorts, musical instruments, and other physical objects" which are converted to or recorded on a media format. ('992 patent, 6:10-22). These are non-limiting examples of the items containing information which are stored in the library means (or source material library).

According to the specification of the '992 patent, each item must be assigned its own unique identification code and each item is stored in the compressed data library as a file comprising the compressed, formatted, sequenced data blocks for that item. ('992 patent, 6:35-39; 10:23-26). Each file is addressable through the unique identification code assigned to the item whose data blocks are stored within the file and such file is accessed and requested via this unique identification code. (10:26-30; 11:22-25; and 14:22-28).

Each item may also have a name, title, production credits (i.e., names of producer, directors, actors, etc.), and other identifying information which may be stored for each item. (6:39-54; 10:66-11:4; 12:8-27; 58-65; 15:3-22). Each item's unique identification code or unique address code, title, name, production credits, etc. may be stored and may be used to request and access the item throughout the transmission and receiving system. ('992 patent, 10:23-30; 10:62 - 11:9; 11:22-25; 12:8-27; 14:22-28; 14:34-48; 15:3-22). Each item may also be given a popularity code and each item may be stored in its compressed form on a different library depending upon its popularity. ('992 patent, 6:39-54; 12:28-57).

In one example, the specification describes an "item" as a "program." The '992 patent describes the steps of finding and selecting a "desired item" and shows in Figure 4 that this entails finding a "desired program" and selecting the "program for transmission." See, '992 patent, 15:6-10 and 20-22. In other words, a program is an example of an item.

4. Conclusion -- The Meaning Of The Phrase "Library Means For Storing Items Containing Information"

The claim phrase "library means for storing items containing information" uses the words "means for" and thus there is a rebuttable presumption that the inventors intended to invoke the means-plus-function construction pursuant to 35 U.S.C. § 112, ¶ 6. Here, the presumption is rebutted by the fact that the claim term "library" elaborates sufficient structure, material, or acts within the claim itself to perform entirely the recited function of storing items containing information.

The term "library" is used in the claim. A library, as discussed above, is "a place where materials are kept or a collection of such materials." A library is therefore a structure -- a place or a collection. The specification states that the library has a geographical location and that multiple libraries in a system may communicate with one another. ('992 patent, 2:65-66; 6:23-30; and 15:13-15).

A place or a collection is a sufficient structure to perform the claimed function of "providing storage room for items containing information." See, Kimberly-Clark, 102 F.3d at 1006-07 (holding that the limitation "perforation means for tearing" was not a means-plus-function claim because the word "perforation" constituted sufficient structure.); Envirco, 209 F.3d at 1365 (holding that Section 112, ¶ 6 does not apply where sufficient physical structure was recited (baffle) and the claim described the particular structure of this particular baffle); Rodime, 174 F.3d at 1303-04 (holding a claim recited sufficient structure where the limitation was "positioning means" and the claim "provided a list of the structure underlying the means").

Therefore, the claim phrase "library means for storing items containing information" is not construed under Section 112, ¶ 6. The phrase "library means for storing items containing information" is therefore construed as:

> a place where items of information are kept or which constitutes a collection of items of information where items are units or members of a group or groups and information is any meaning assigned to data by known conventions.

C. "Storing Items Having Information In A Source Material Library"

The phrase "storing items having information in a source material library" is found in claim 41 of the '992 patent. (Exhibit 6 shows the use of this phrase throughout the '992 patent).

The phrase is comprised of three separate terms/phrases: (1) storing; (2) items having information; and (3) source material library, all of which should be defined in their ordinary and customary usage.

1. The Meaning Of The Term "Storing"

The term "storing" in the context of this phrase of claim 41 is being used to describe a definite action -- the act of "storing." The dictionary definition for this use of the term "storing" is "**3:** to place or leave in a location (as a warehouse, library, or computer memory) for preservation or later use or disposal." (Webster's, at 1162; Exhibit 12).

2. The Meaning Of The Phrase "Items Having Information"

There is no material difference between the phrases "items containing information" (from claim 1) and "items having information" from claim 41. As previously discussed, the phrase "items having information" is construed as "units or members of a group or groups which have information. Information is the meaning assigned to data by known conventions." ('992 patent, 6:12-15 and 6:19-22)

3. The Meaning Of The Phrase "Source Material Library"

The term "source" has a relevant dictionary definition: "**1 b (1):** a point of origin or procurement: beginning." (Webster's, at 1127; Exhibit 12). The term "material" has a relevant dictionary definition: "**1 a (1):** relating to, derived from, or consisting of matter. . . **3 b:** relating to or concerned with physical rather than spiritual or intellectual things." (Webster's, at 733; Exhibit 12). The term "library" has a relevant dictionary definition: "**1 a:** a place in which literary, musical, artistic, or reference materials (as books, manuscripts, recordings, or films) are kept for use, but not for sale **b:** a collection of such materials." (Webster's, at 688; Exhibit 12). Thus, the phrase "source material library" is construed as: "a place where source material is kept or a collection of source material. Source material are physical things at the point of origin or procurement."

4. Conclusion -- The Meaning Of The Phrase "Storing Items Having Information In A Source Material Library"

Pursuant to the above, the phrase "storing items having information in a source material library" is construed as:

> the act of placing items having information in a source material library for later use where a source material library is a place where source material is kept or a collection of such material, source material are physical things at the point of origin or procurement, items having information are units or members of groups which have information, and information is any meaning assigned to data by known conventions.

D. "Unique Identification Code"

The phrase "unique identification code" is found in claims 1 and 41 of the '992 patent. (Exhibit 7 shows the use of this phrase in the '992 patent). It is used in its ordinary and customary usage, and should be construed as "symbols used to identify, such symbols being unique in the sense that no two identification codes are identical when assigned."

In claim 1, the phrase "unique identification code" is used in the phrases:

> identification encoding means for retrieving the information in the items from the library means and for assigning a ***unique identification code*** to the retrieved information;
>
> * * *
>
> compressed data storing means, coupled to the data compression means, for storing as files the compressed, sequenced data blocks received from the data compression means with the ***unique identification code*** assigned by the identification encoding means

In claim 41, the phrase "unique identification code" is used in the phrases:

> assigning a ***unique identification code*** to the retrieved information;
>
> * * *
>
> storing, as a file, the compressed, formatted, and sequenced data blocks with the assigned ***unique identification code***;

The term "unique" has a relevant dictionary definition: "**1**: being the only one." (Webster's, at 1290; Exhibit 12). The term "identification" has a relevant dictionary definition: "**1 a:** an act of identifying." (Webster's, at 597; Exhibit 12). The term "code" has a relevant dictionary definition: "**3 b:** a system of symbols (as letters, numbers, or words) used to represent assigned and often secret meanings." (Webster's, at 255; Exhibit 12).

The specification of the '992 patent states that a unique identification code is assigned by the identification encoder 112 and that the compressed sequenced data received from the compression means is stored as a file with the unique identification code. ('992 patent, 2:43-45). The specification further describes the purposes for the unique identification codes as: (1) making files addressable: "[t]he file is addressable through the unique identification code assigned to the data by the identification encoder 112" ('992 patent, 10:28-30); (2) permitting a user to have access to an item: "a user may preferably access an item via its unique identification code, via its title, or the user may use other known facts for accessing an item" ('992 patent, 11:22-25); and (3) permitting a user to request transmission of a selected item: "The user request may preferably be made from a catalog sent to each of the subscribers of the system. The user will preferably identify his choice and enter the corresponding identification code of the item (step 3060)" ('992 patent, 14:22-26).[17]

Thus, to achieve the purposes of the unique identification code as set forth in the specification (i.e., to make files addressable, and permit access and requests), the identification code is unique in the sense that no two identification codes are identical when assigned (the claim language is "assigning a unique identification code.").

E. "Identification Encoding Means For Retrieving The Information In The Items From The Library Means And For Assigning A Unique Identification Code To The Retrieved Information"

The phrase "identification encoding means for retrieving the information in the items from the library means and for assigning a unique identification code to the retrieved information" is found in claim 1 of the '992 patent. (Exhibit 8 shows the use of this phrase throughout the '992 patent).

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[17] The '992 patent specification describes other codes or addresses which also are used for the same purposes -- the "unique address code," the "file address," the "library system address," and the "compressed data library address." ('992 patent, 6:48-52 and 10:46-65). These other codes are merely other embodiments of the unique identification code, which alone, or in combination, make items addressable and permit user access and requests for items. ('992 patent, 10:46-65 and 11:25-28). Like the unique identification code, the unique address code is assigned by the identification encoder 112. ('992 patent, 6:49-50; 11:58-61). Like the unique identification code, the unique address code is described as being a file address "for uniquely identifying the compressed data items stored in the compressed data library section of a library system" and as also permitting users access to the item and making the files addressable. ('992 patent, 10:46-65; 11:25-28). In a preferred embodiment, the identification encoder assigns both a unique identification code and a file address. ('992 patent, 6:49-50). Thus, the claim phrase "unique identification code" encompasses the unique address code, the file address, the library system address, and the compressed data library address, either alone or in combination.

This phrase includes the terms "means for" and therefore the phrase is presumed to be construed as a means-plus-function claim element pursuant to 35 U.S.C. § 112, ¶ 6. This presumption is not rebutted and this claim phrase is construed as a means-plus-function claim element. Thus, the Court must first define the claimed function in this phrase. Sage Products, 126 F.3d at 1427-28.

5. The Two Claimed Functions -- "Retrieving The Information In The Items From The Library Means" And "Assigning A Unique Identification Code To The Retrieved Information"

There are two functions performed by the identification encoding means, which are found in the claim element itself -- (1) retrieving the information in the items from the library means; and (2) assigning a unique identification code to the retrieved information.

1) The Meaning Of The Phrase "Retrieving Information In The Items From The Library Means"

The ordinary and customary meaning of the term "retrieve" is "**7:** to get and bring back; *esp*: to recover (as information) from storage." (Webster's, at 1008; Exhibit 12).

In the context of the '992 patent, the information is in items, and the items are different media types which may be stored in the library means: "The different media formats preferably include digital or analog video tapes, laser disks, film images, optical disks, magnetic disks, computer tapes, disks, and cartridges." ('992 patent, 6:19-22).

The specification of the '992 patent discusses the function of retrieving information as being analogous to taking books off of a shelf at the local public library:

> As illustrated in FIG. 7, the first step of the distribution method 400 involves retrieving the information for selected items in the source

> material library 111, upon a request by a user of the distribution system (step 412). This is analogous to taking books off of a shelf at the local public library after the person has decided that he or she would like to read them.

('992 patent, 18:53-59).

The specification further provides an example of retrieved information as being a "motion picture film": "If, for example, the retrieved information to be converted from the source material library 111 is a motion picture film, ..." ('992 patent, 7:35-37). A motion picture film is described in the specification as one of the media formats on which items of information may be stored prior to conversion. ('992 patent, 6:2-22). Thus, the retrieved information is in one of these exemplary media formats when it is retrieved. (See, '992 patent, 6:12-15 and 6:19-22).

In the context of the '992 patent specification, the information in the items is retrieved from the library means, one item at a time. In the conversion process described in the specification of the '992 patent, each individual item of information must be assigned its own unique identification code and each item of information must be stored in a compressed data library with its unique identification code:

> Prior to being made accessible to a user of the transmission and receiving system of the present invention, the item must be stored in at least one compressed data library 118, and given a unique identification code by identification encoder 112."

('992 patent, 6:35-39).

Following conversion, the converted data is stored in the compressed data library 118 as a file and "[t]he file is addressable through the unique identification code assigned to the data by the identification encoder 112." ('992 patent, 10:28-30; See also, 11:22-25; 14:22-28; 14:34-48). The unique identification code therefore makes each item of information accessible to users. ('992 patent, 11:22-25).

Thus, for each item to be assigned a unique identification code and to be stored with this unique identification code, the information must be retrieved, one item at a time -- i.e., the information in a first item is retrieved, and thereafter the information in at least one additional item is retrieved. The phrase "retrieving the information in the items from the library means" means getting and bringing back a first item from the library means and thereafter getting and bringing back at least one additional items from the library means.

m) The Meaning Of The Phrase "Assigning A Unique Identification Code To The Retrieved Information"

The ordinary and customary meaning of the term "assign" is "**1.** to set apart for a particular purpose; designate." (The American Heritage Dictionary of the English Language, New College Edition, Houghton Mifflin Company, at 79 (1976), hereinafter American Heritage; Exhibit 14).

The phrase "unique identification code" is construed above as meaning "symbols used to identify, such symbols being unique in the sense that no two identification codes are identical when assigned."

The specification describes the assigning of a unique identification code to retrieved information. In particular, the specification states that an item must be given a unique identification code. ('992 patent, 6:35-39). The act of giving the item a unique identification code is referred to as "storage encoding" in the patent specification. ('992 patent, 6:39-43). Storage encoding (e.g., assigning a unique identification code to the item) may be performed "just prior to conversion of the item for transmission to reception system 200, at any time after starting the conversion process, or after storing the item in the compressed data library 118."[18] ('992 patent, 6:43-47). Storage encoding, in addition to being performed by identification encoder

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[18] There is nothing in claim 1 (or claim 41) which requires that the unique identification code be assigned prior to conversion. The claim is silent as to when the unique identification code is assigned. According to this portion of the specification, the unique identification may be assigned prior to conversion, after starting the conversion process, or after storing the item in the compressed data library. Thus, claim 1 (and claim 41) should be construed so that the unique identification code is assigned at any of these times. See, Interactive Gift Express, Inc. v. Compuserve Inc., 231 F.3d 859, 875-76 (Fed. Cir. 2000) ("unless the steps of a method actually recite an order, the steps are not ordinarily construed to require one.").

112 is performed by a system operator. ('992 patent, 6:39-41; 8:42-45; 10:58-61; 11:13-17).

Thus, the phrase "assigning a unique identification code to the retrieved information" means that "for a first item, symbols are designated which uniquely identify the first item and, for at least one additional item, other symbols are designated to uniquely identify that additional item."

6. The Structures Disclosed For Performing The Two Claimed Functions

As discussed above, the items containing information are described in the specification as having different media types which may be stored in the library means: "The different media formats preferably include digital or analog video tapes, laser disks, film images, optical disks, magnetic disks, computer tapes, disks, and cartridges." ('992 patent, 6:19-22).

The function of retrieving the information in the items is described in the specification of the '992 patent as being performed by a person, e.g, a system operator or computer software, depending upon the media type of the item. ('992 patent, 6:39-41; 8:42-45; 10:58-61; 11:13-17; 17:54-64; 18:53-59).

For items stored on video tapes, laser disks, film images, optical disks, magnetic disks, computer tapes, and cartridges, i.e., items which may be physically handled by a person (as a book would be handled by a person), the structure is a person (e.g., system operator). ('992 patent, 6:39-41; 8:42-45; 10:58-61; 11:13-17; 18:53-59).

A person cannot physically handle a computer file stored on a computer disk (a file is one form of a material disclosed as being stored in the library '992 patent, 6:13). Thus, for computer files stored on a computer disk, one of ordinary skill in the art would understand that computer software used to retrieve the file from the computer disk is "analogous to taking books off a shelf at the local public library." See also 17:54-64 ("The system may also preferably include dispatching control software ...The dispatch software may also coordinate ... source material library 111 utilization, ...").

The '992 patent describes the function of assigning a unique identification code to the retrieved information as being performed by an identification encoder 112 and/or a system operator. ('992 patent, 6:35-43; 8:42-45; 10:58-61; 11:13-17; 18:63-69).

Thus, the "identification encoding means" is construed as a person (e.g. system operator) or computer software having identification encoding capabilities, or a combination of both and all equivalents thereto.

F. "Sequence Of Addressable Data Blocks"

The phrase "sequence of addressable data blocks" is found in claims 1 and 41 of the '992 patent. (Exhibit 9 shows the use of this phrase throughout the '992 patent). In connection with this phrase, the inventors acted as their own lexicographer.

In claim 1, the phrase "sequence of addressable data blocks" is used in the phrase:

> ordering means, coupled to the conversion means, for placing the formatted data into a ***sequence of addressable data blocks***;

In claim 41, the phrase "sequence of addressable data blocks" is used in the phrase:

> placing the formatted data into a ***sequence of addressable data blocks***

The inventors discussed the phrase "sequence of addressable data blocks" in the specification of the '992 patent with respect to the "ordering means." The inventors stated that the "ordering means in the preferred embodiment includes time encoder 114." ('992 patent, 7:62-63). The time encoder 114 "places the blocks of converted formatted information from converter 113 into a group of addressable data blocks." ('992 patent, 7:66 -- 8:1).

Importantly, when describing the step of placing the data into a sequence of addressable data blocks, the inventors defined the preferred addressing scheme as employing time encoding: "[t]he preferred addressing scheme employs time encoding." ('992 patent, 8:1-2; emphasis added). In other words, the inventors are acting as their own lexicographer by defining the addressing scheme in the phrase "sequence of addressable data blocks" as time encoding. See, e.g., CCS Fitness, 288 F. 3d at 1366.

The inventors described how the time encoder achieves time encoding by assigning relative time markers to the series of audio and video data (i.e., audio samples and video frames) from the converter:

> The converted formatted information of the requested material is then preferably in the form of a series of digital data bytes which represent frames of video data and samples of audio data. A preferred relationship of the audio and video bytes to each other is shown in FIG. 8. Incoming signals are input and converted in sequence, starting with the first and ending with the last frame of the video data, and starting with the first and ending with the last sample of the audio data. Time encoding by time encoder 114 is achieved by assigning relative time markers to the audio and video data as it passes from the converter 113 through the time encoder 114 to the precompression processor 115.

('992 patent, 8:7-19; emphasis added).

The inventors described a video frame as an example of a data block of video data when they described Figure 8a:

> FIG. 8a shows the block structure of video data where a video frame 812 is composed of a plurality of video samples 811, and a second of video 813 is composed of a plurality of video frames 812.[19]

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[19] As background, a frame of video is essentially one picture or "still" out of a video stream. Television signals in the United States have a frame rate of 30 frames per second. Film has a frame rate of 24 frames per second. In Figure 8a, reference numeral 813 shows "one second of video" and shows that there are a total of 30 frames in that one second of video. Thus, by referring to video frames as video data blocks in the specification, the inventors meant that conventional video frames, such as a television video frame, could comprise a video data block.

('992 patent, 19:40-43; emphasis added). Similarly, the inventors described an audio sample as an example of a data block of audio data when they described Figure 8b:

> FIG. 8b shows the block structure of audio data where an audio data frame 822 is composed of a plurality of audio sample 821, and a second of audio 823 is composed of a plurality of audio data frames 822.[20]

('992 patent, 19:40-43; emphasis added).

Time encoding permits the system to identify a frame by its frame number. Frames are a subset of, and contained within, the items stored within the compressed data library. ('992 patent, 8:48-50). Thus, the inventors described the addressing scheme provided by time encoding as providing addressability of the data blocks/frames within an item and making items addressable throughout the transmission system:

(1) time encoding makes possible system addressing of particular data bytes ('992 patent, 20-22);

(2) time encoding allows user addressing of particular portions of items ('992 patent, 8:21-22);

(3) time encoding makes possible the ability to address any particular block of audio or video data ('992 patent, 8:24-26);

(4) time encoding allows users to move through data in various modes by moving through frame addresses at various rates ('992 patent, 8:34-36); and

(5) time encoding makes items and subsets of items retrievable and

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[20] As background, an audio sample is the value of an analog audio signal at a given moment in time. A typical sample rate for audio stored on a music CD is 44,100 samples per second. In Figure 8b, reference numeral 823 shows "one second of audio" and shows that one second of audio is comprised of 30 audio frames. Each audio frame is shown in 822 as comprising 1,470 samples. If there are 30 audio frames and each audio frame has 1,470 samples, then in the one second of audio depicted in Figure 8b, there are 44,100 samples. Thus, by referring to audio samples as audio data blocks in the specification, the inventors meant that conventional audio samples, such as a music CD audio sample, comprise an audio data block.

addressable throughout the transmission system ('992 patent, 8:50-52).[21]

Thus, the addressability being provided by time encoding and described by the inventors is the addressability of video frames and/or audio samples within an item. (See, e.g., '992 patent, 8:48-50).

Giving further support to the inventor's intent to define sequence of addressability through time encoding, time encoding addressability is distinguished from two other types of addressability which are also described in the specification. The first type of addressability not provided by time encoding is the ability to locate an item stored within the compressed data library using its unique identification code. ('992 patent, 10:26-30). The second type of address is the address of the user, which is included in a user request for the item. ('992 patent, 12:24-25).

The addressability described by the inventors that is provided by time encoding is also different than the dictionary meaning for address: "**(2)(a)** an identification, as represented by a name, label, or number, for a register, location in storage, or any other data source or destination such as the location of a station in a communication network." (IEEE Dictionary, at 23; Exhibit 13).

The claim construction presumption that the phrase "sequence of addressable data blocks" be given its ordinary and customary meaning is therefore overcome. The inventors have acted as their own lexicographer in defining what they meant by the phrase "sequence of addressable data blocks."

Thus, in accordance with the discussion in the specification of a sequence of addressable data blocks ('992 patent, 7:56-8:52, Figs. 8a and 8b), the phrase "sequence of addressable data blocks" means:

a series of digital data bytes which represent frames of video data

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[21] Time encoding provides other benefits in addition to addressability. For instance, time encoding makes possible realignment of audio and video data after separate audio and video compression ('992 patent, 8:2-6; 8:20-21). Time encoding also enables subsequent compression of the information to be improved, because data reduction processes may be performed in the time dimension. ('992 patent, 8:52-55).

> and/or samples of audio data wherein relative time markers assigned to the audio and/or video data makes the frames of video data and/or samples of audio data addressable within a particular item of information.

G. "Compressed Data Storing Means ... For Storing As Files The Compressed, Sequenced Data Blocks With The Assigned Unique Identification Code"

The phrase "compressed data storing means ... for storing as files the compressed, sequenced data blocks with the assigned unique identification code" is found in claim 1 of the '992 patent. (Exhibit 10 shows the use of this phrase in the '992 patent).

This phrase includes the terms "means for" and therefore the phrase is presumed to be construed as a means-plus-function claim element pursuant to 35 U.S.C. § 112, ¶ 6. This presumption is not rebutted and this claim phrase is construed as a means-plus-function claim element. Thus, the Court must first define the claimed function in this phrase. Sage Products, 126 F.3d at 1427-28.

1. The Claimed Function -- "Storing As Files The Compressed, Sequenced Data Blocks With The Assigned Unique Identification Code"

The claimed function is found in the claim phrase itself "for storing as files the compressed, sequenced data blocks with the assigned unique identification code."

a) The Meaning Of The Phrase "Compressed, Sequenced Data Blocks"

The phrase "compressed, sequenced data blocks" has antecedent basis in the items containing information which were retrieved by the identification encoding means, formatted by the conversion means, ordered by the ordering means, and compressed by the compression means. Thus, to understand the meaning of "compressed, sequenced data blocks," the Court must consider the context of the surrounding words in the claim and read all portions of the written description in a manner that renders the patent internally consistent. Arlington Industries, 345 F.3d at 1325; Budde, 250 F.3d at 1379-80 ("In construing terms used in patent claims, it is necessary to consider the specification as a whole, and to read all portions of the written description, if possible, in a manner that renders the patent internally consistent.")

In claim 1, as discussed above with respect to the identification encoding means, the transmission system must operate on multiple items in a sequential manner -- i.e., one item at a time. This is because the specification of the '992 patent requires that each item be assigned a unique identification code ('992 patent, 6:35-39), because each item is stored as a file comprised of the compressed and sequenced data blocks in the compressed data library and is addressable through its assigned unique identification code ('992 patent, 10:23-30), and because each file comprising each item is accessible and capable of being requested by a user using the unique identification code. ('992 patent, 11:22-25; 14:22-28).

Reading claim 1 in its entirety, the phrase "retrieving the information in the items from the library means", as discussed above, means that the information in a first item is retrieved from the library means and that at least the information in one additional item is thereafter retrieved from the library means. The identification encoding means assigns a unique identification code to the retrieved information for the first item and thereafter assigns another unique identification code for the next additional item, and so on. The retrieved information for the first item is placed in a predetermined format as formatted data by the conversion means and then the retrieved information for the next item is placed in a predetermined format as formatted data, and so on. The formatted data for the first item is then placed into a sequence of addressable data blocks by the ordering means and the formatted data for the next item is placed into a sequence of addressable data blocks, and so on. The formatted and sequenced data blocks for the first item is then compressed by the compression means and the formatted and sequenced data blocks for the next item is then compressed by the compression means, and so on.

b) The Meaning Of The Term "Storing"

The term "storing" in the context of this phrase of claim 1 is being used to describe a definite action -- the act of "storing." The dictionary definition for this use of the term "storing" is "to place or leave in a location (as a warehouse, library, or computer memory) for preservation or later use or disposal." (Webster's, at 1162; Exhibit 12). This is consistent with the use of the term "storing" with respect to "files" in the specification: "After the data is processed into a file, by the compressed data storing means 117, it is preferably stored in a compressed data library 118." ('992 patent, 10:36-39).

The term "storing" is therefore construed as "the act of placing or leaving in a location for later use."

c) The Meaning Of The Term "File"

The term "file" in the context of computers has its ordinary and customary meanings: "**2 c:** a collection of related data records (as for a computer)." (Webster's, at 462; Exhibit 12) and "a set of related records treated as a unit." (IEEE, at 372; Exhibit 13). This is consistent with the use of the term "file" in the specification of the '992 patent: "After compression processing by compressor 116, the compressed audio and video data is preferably formatted and placed into a single file by the compressed data storing means 117."

The term "file" is therefore construed as "a collection of data or a set of related records treated as a unit."

d) The Meaning Of The Term "With" In The Phrase "Storing As Files . . . With The Assigned Unique Identification Code"

As used in the phrase "storing as files, . . . with the assigned unique identification code," the term "with" is used "**4 a:** as a function word to indicate combination, accompaniment, presence, or addition." (Webster's, at 1355).

The specification states that the audio and video data received from the compressor is formatted and placed into a single file and describes additional information that may be stored in the file. The specification never states that the unique identification code is stored within the file -- instead, the specification states that the file is addressable through the unique identification code:

> After compression processing by compressor 116, the compressed audio and video data is preferably formatted and placed into a single file by the compressed data storing means 117. The file may contain the compressed audio and/or video data, time markers, and the program notes. The file is addressable through the unique identification code assigned to the data by the identification encoder 112.

('992 patent, 10:23-30; emphasis added; See also, 10:17-22; 19:5-10 and 11:22-25: "a user may preferably access an item via its unique identification code.").

Thus, in accordance with the specification of the '992 patent, the term "with" is used in this phrase to mean "combination, accompaniment, presence, or addition" in the sense that the file stored in the compressed data library is addressable through its assigned unique identification code.

2. The Structure Disclosed For Performing The Claimed Function

Having identified the claimed function for the compressed data storing means, the Court must identify the corresponding structure, material, or acts described in the specification to perform this function. Sage Products, 126 F.3d at 1427-28.

The structure of the compressed data storing means is described in the specification of the '992 patent as being:

(1) a compressed data formatter, which places the audio and video data for an item into a file, the file being addressable through the unique identification code. ('992 patent, 10:23-30; 7:48-58; 12:65-69; Figure 2a, item 117); and

(2) a compressed data library, in which the files for the items are stored and

from which users may access the files using the unique identification code assigned to the file ('992 patent, 10:34-45; 11:22-28; 12:32-57; 13:1-28; Fig. 2b, Item 118). The compressed data library is described in the specification as a network or mass storage devices connected together via a high speed network ('992 patent, 10:39-42; 13:9-27); Winchester or magneto-optical disks ('992 patent, 12:42-47), digital cassette tapes ('992 patent, 12:48-57); or large capacity storage ('992 patent, 19:11-17; Fig. 7, Item 414).

Thus, the compressed data storing means:

a compressed data formatter and a compressed data library, i.e., a large capacity storage or mass storage device, and all equivalents thereto.

H. "Storing, As A File, The Compressed, Formatted And Sequenced Data Blocks With The Assigned Unique Identification Code"

The phrase "storing, as a file, the compressed, formatted and sequenced data blocks with the assigned unique identification code" is found in claim 41 of the '992 patent. (Exhibit 11 shows the use of this phrase in the '992 patent).

The phrase "compressed, formatted and sequenced data blocks with the assigned unique identification code" has antecedent basis in the items having information which were retrieved, placed in a predetermined format, placed into a sequence of addressable data blocks, and compressed by the compression means. Thus, to understand the meaning of this phrase, the Court must consider the context of the surrounding words in the claim and read all portions of the written description in a manner that renders the patent internally consistent. Arlington Industries, 345 F.3d at 1325; Budde, 250 F.3d at 1379-80.

1. The Meaning Of The Phrase "Compressed, Formatted And Sequenced Data Blocks"

In claim 41, the steps of retrieving, assigning, placing into a predetermined format, placing into a sequence of addressable data blocks, and compressing are what creates the compressed, sequenced and formatted data blocks. In these steps, multiple items are acted upon, but in a sequential manner -- i.e., one item at a time. This is because the specification of the '992 patent requires that each item have assigned a unique identification code ('992 patent, 6:35-39), because each item is stored in the compressed data library as a file comprising the compressed, formatted, and sequenced data blocks for the item, which is addressable through its assigned unique identification code ('992 patent, 10:23-30), and because each item must be accessible and capable of being requested by a user using the unique identification code. ('992 patent, 11:22-25; 14:22-28).

The phrase "storing, as a file, the compressed, formatted and sequenced data blocks with the assigned unique identification code" therefore refers to storing as a file the compressed, formatted and sequenced data blocks for a first item, and then storing as a file the compressed, formatted, and sequenced data blocks for at least one additional item.

The terms "storing," "file," and "with" are construed above with respect to "compressed data storing means" and their construction is the same for the "storing" element of claim 41.

2. Conclusion -- The Meaning Of The Phrase "Storing, As A File, The Compressed, Formatted And Sequenced Data Blocks With The Assigned Unique Identification Code"

In accordance with the above, the phrase "storing, as a file, the compressed, formatted and sequences data blocks with the assigned unique identification code" is construed as:

> the compressed, formatted and sequenced data blocks for a first item are placed into a file (a collection of data or a set of related records treated as a unit which is placed in a location for later use), the file for the first item being addressable through the unique identification code assigned to the first item. Thereafter, the compressed, formatted and sequenced data blocks for at least one additional item are each placed into a file, each file being placed in a location for later use, the file for each additional item being addressable through the unique identification code assigned to each additional item.

IV. CONCLUSION

For the foregoing reasons and authorities, Acacia respectfully requests that its proposed claim constructions be adopted by this Court.

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